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11may04 09:29:52 User208760 Session D2467.2  
\$0.00 0.071 DialUnits File410  
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\$0.02 Estimated cost this search  
\$0.35 Estimated total session cost 0.165 DialUnits

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File 5:Biosis Previews(R) 1969-2004/May W1  
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Set Items Description  
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? e au=fox gary ?

Ref	Items	Index-term
E1	1	AU=FOX GAIL
E2	2	AU=FOX GAREY A
E3	0	*AU=FOX GARY ?
E4	2	AU=FOX GARY G
E5	19	AU=FOX GARY M
E6	9	AU=FOX GARY N
E7	9	AU=FOX GEOFFREY Q
E8	1	AU=FOX GEORGE
E9	7	AU=FOX GEORGE A
E10	2	AU=FOX GEORGE C
E11	71	AU=FOX GEORGE E
E12	2	AU=FOX GEORGE L

Enter P or PAGE for more

? s e3-e6  
0 AU=FOX GARY ?  
2 AU=FOX GARY G  
19 AU=FOX GARY M  
9 AU=FOX GARY N  
S1 30 E3-E6  
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S2 29 RD S1 (unique items)  
? e au=yoshinaga steven ?

Ref	Items	Index-term
E1	3	AU=YOSHINAGA STEVE K
E2	1	AU=YOSHINAGA STEVEN
E3	0	*AU=YOSHINAGA STEVEN ?
E4	22	AU=YOSHINAGA STEVEN K
E5	2	AU=YOSHINAGA STEVEN KIYOSHI
E6	3	AU=YOSHINAGA SUMIKO
E7	5	AU=YOSHINAGA SYUYA
E8	235	AU=YOSHINAGA T
E9	118	AU=YOSHINAGA T.
E10	1	AU=YOSHINAGA TADAHIKO
E11	2	AU=YOSHINAGA TAKAAKI

E12 4 AU=YOSHINAGA TAKAHARU

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3 AU=YOSHINAGA STEVE K  
1 AU=YOSHINAGA STEVEN  
0 AU=YOSHINAGA STEVEN ?  
22 AU=YOSHINAGA STEVEN K  
2 AU=YOSHINAGA STEVEN KIYOSHI

S3 28 E1-E5

? s (s1 or s3) and (b7(w)L or b7(w)h2 or b7(w)H7 or bsl3 or pd(w)L2)

30 S1  
28 S3  
19041 B7  
1970607 L  
8 B7 (W) L  
19041 B7  
76873 H2  
42 B7 (W) H2  
19041 B7  
13792 H7  
0 B7 (W) H7  
11 BSL3  
2463403 PD  
19530 L2  
116 PD(W)L2  
S4 0 (S1 OR S3) AND (B7 (W)L OR B7 (W)H2 OR B7 (W)H7 OR BSL3 OR  
PD(W)L2)

? s (s1 or s3) and b7?

30 S1  
28 S3  
23703 B7?  
S5 17 (S1 OR S3) AND B7?

? rd s5

...completed examining records

S6 12 RD S5 (unique items)

? t s6/3/all

6/3/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014560976 BIOSIS NO.: 200300516339

Interaction of **B7RP-1** with ICOS negatively regulates antigen presentation by B cells.

AUTHOR: Wahl Patricia; Schoop Roland; Horan Thomas P; **Yoshinaga Steven K**; Wuthrich Rudolf P (Reprint)

AUTHOR ADDRESS: Division of Nephrology, Kantonsspital, Rorschacherstrasse 95, 9007, Saint Gallen, Switzerland\*\*Switzerland

AUTHOR E-MAIL ADDRESS: rpw@kssg.ch

JOURNAL: Inflammation 27 (4): p191-200 August 2003 2003

MEDIUM: print

ISSN: 0360-3997 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

6/3/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014548784 BIOSIS NO.: 200300503812

The **B7** family member **B7-H3** preferentially down-regulates T

helper type 1-mediated immune responses.

AUTHOR: Suh Woong-Kyung; Gajewska Beata U; Okada Hitoshi; Gronski Matthew A ; Bertram Edward M; Dawicki Wojciech; Duncan Gordon S; Bukczynski Jacob; Plyte Suzanne; Elia Andrew; Wakeham Andrew; Itie Annick; Chung Stephen; da Costa Joan; Arya Sudha; Horan Tom; Campbell Pauline; Gaida Kevin; Ohashi Pamela S; Watts Tania H; **Yoshinaga Steven K**; Bray Mark R; Jordana Manel; Mak Tak W (Reprint

AUTHOR ADDRESS: Advanced Medical Discovery Institute, Ontario Cancer Institute, and Departments of Medical Biophysics and Immunology, University of Toronto, 620 University Avenue, Toronto, Ontario, M5G 2C1, Canada\*\*Canada

AUTHOR E-MAIL ADDRESS: tmak@uhnres.utoronto.ca

JOURNAL: Nature Immunology 4 (9): p899-906 September 2003 2003

MEDIUM: print

ISSN: 1529-2908 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

6/3/3 (Item 3 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0014115818 BIOSIS NO.: 200300074537

Potent activity of soluble **B7RP-1-FC** in therapy of murine tumors in syngeneic hosts.

AUTHOR: Ara Gulshan; Baher Angelo; Storm Neal; Horan Tom; Baikalov Claudia; Brisson Emil; Camacho Reuben; Moore Alison; Goldman Hartt; Kohno Tadahiko; Cattley Russell C; Van Gwyneth; Gaida Kevin; Zhang Ming; Whoriskey John S ; Fong David; **Yoshinaga Steven K** (Reprint

AUTHOR ADDRESS: Department of Inflammation, Amgen Inc., One Amgen Center Drive, Thousand Oaks, CA, 91320, USA\*\*USA

AUTHOR E-MAIL ADDRESS: skybay@adelphia.net

JOURNAL: International Journal of Cancer 103 (4): p501-507 10 February, 2003 2003

MEDIUM: print

ISSN: 0020-7136

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

6/3/4 (Item 4 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013967480 BIOSIS NO.: 200200560991

Inducible costimulator costimulates cytotoxic activity and IFN-gamma production in activated murine NK cells

AUTHOR: Ogasawara Kouetsu; **Yoshinaga Steven K**; Lanier Lewis L (Reprint

AUTHOR ADDRESS: Department of Microbiology and Immunology, Cancer Research Institute, University of California, 513 Parnassus Avenue, HSE 420, Box 0414, San Francisco, CA, 94143-0414, USA\*\*USA

JOURNAL: Journal of Immunology 169 (7): p3676-3685 October 1, 2002 2002

MEDIUM: print

ISSN: 0022-1767

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

6/3/5 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0013775596 BIOSIS NO.: 200200369107

The **B7RP-1**/ICOS T-cell co-stimulation pathway

AUTHOR: **Yoshinaga Steven Kiyoshi** (Reprint); Khare Sanjay (Reprint); Coccia Marco; Senaldi Giorgio (Reprint); Baikalov Claudia; Danilenko Dimitry; Horan Tom; Zhang Ming (Reprint); Gaida Kevin (Reprint); Whoriskey John (Reprint); Gresser Michael (Reprint); Ara Gulshan; Byrne Fergus (Reprint); Kohno Hiko; Edwards Carl K (Reprint)

AUTHOR ADDRESS: Inflammation, Amgen Inc., One Amgen Center Drive, Thousand Oaks, CA, 91320, USA\*\*USA

JOURNAL: FASEB Journal 16 (4): pA713 March 20, 2002 2002

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Professional Research Scientists on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002; 20020420

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

6/3/6 (Item 6 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013759254 BIOSIS NO.: 200200352765

Renal tubular epithelial expression of the costimulatory molecule **B7RP-1** (Inducible Costimulator Ligand)

AUTHOR: Wahl Patricia; Schoop Roland; Bilic Grozdana; Neuweiler Jorg; Le Hir Michel; **Yoshinaga Steven K**; Wuthrich Rudolf P (Reprint)

AUTHOR ADDRESS: Division of Nephrology, Cantonal Hospital, Rorschacherstrasse 95, 9007, St. Gallen, Switzerland\*\*Switzerland

JOURNAL: Journal of the American Society of Nephrology 13 (6): p1517-1526 June, 2002

MEDIUM: print

ISSN: 1046-6673

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

6/3/7 (Item 7 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013736658 BIOSIS NO.: 200200330169

**B7RP-1**, a novel renal tubular epithelial antigen with costimulatory function

AUTHOR: Wahl Patricia (Reprint); Bilic Grozdana (Reprint); Neuweiler Jorg; **Yoshinaga Steven K**; Wuthrich Rudolf P (Reprint)

AUTHOR ADDRESS: Division of Nephrology, Saint Gallen, Switzerland\*\* Switzerland

JOURNAL: Journal of the American Society of Nephrology 12 (Program and Abstract Issue): p643A-644A September, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: ASN (American Society of Nephrology)/ISN (International Society of Nephrology) World Congress of Nephrology San Francisco, CA, USA October 10-17, 2001; 20011010

ISSN: 1046-6673

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Citation

LANGUAGE: English

6/3/8 (Item 8 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0013582313 BIOSIS NO.: 200200175824  
Transgenic mice over-expressing the **B7** related protein-1 (**B7RP**-1) develop an intestinal pathology similar to human Crohn's disease a new mouse model of inflammatory bowel disease  
AUTHOR: Byrne Fergus R (Reprint); Whoriskey John S; Sarmiento Ulla; Senaldi Giorgio; Zhang Ming; Gaida Kevin; Danilenko Dmitry; **Yoshinaga Steven K**  
AUTHOR ADDRESS: Dept of Pathology, Amgen Inc, Thousand Oaks, CA, USA\*\*USA  
JOURNAL: Gastroenterology 120 (5 Supplement 1): pA.47 April, 2001 2001  
MEDIUM: print  
CONFERENCE/MEETING: 102nd Annual Meeting of the American Gastroenterological Association and Digestive Disease Week Atlanta, Georgia, USA May 20-23, 2001; 20010520  
SPONSOR: American Gastroenterological Association  
American Association for the Study of Liver Diseases  
American Society for Gastrointestinal Endoscopy  
Society for Surgery of the Alimentary Tract  
ISSN: 0016-5085  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Citation  
LANGUAGE: English

6/3/9 (Item 9 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0012911329 BIOSIS NO.: 200100083168  
ICOS is essential for effective T-helper-cell responses  
AUTHOR: Tafuri Anna; Shahinian Arda; Bladt Friedhelm; **Yoshinaga Steve K**; Jordana Manel; Wakeham Andrew; Boucher Louis-Martin; Bouchard Denis ; Chan Vera S F; Duncan Gordon; Odermatt Bernhard; Ho Alexandra; Itie Annick; Horan Tom; Whoriskey John S; Pawson Tony; Penninger Josef M; Ohashi Pamela S; Mak Tak W (Reprint)  
AUTHOR ADDRESS: Amgen Institute, 620 University Avenue, Toronto, ON, M5G 2C1, Canada\*\*Canada  
JOURNAL: Nature (London) 409 (6816): p105-109 4 January, 2001 2001  
MEDIUM: print  
ISSN: 0028-0836  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

6/3/10 (Item 10 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0012773038 BIOSIS NO.: 200000491351  
Characterization of a new human **B7**-related protein: **B7RP**-1 is the ligand to the co-stimulatory protein ICOS  
AUTHOR: **Yoshinaga Steven K** (Reprint); Zhang Ming; Pistillo Jeanne; Horan Tom; Khare Sanjay D; Miner Kent; Sonnenberg Michael; Boone Tom; Brankow David; Dai Tianang; Delaney John; Han Hong; Hui Ariela; Kohno Tadahiko; Manoukian Raffi; Whoriskey John S; Coccia Marco A  
AUTHOR ADDRESS: Exploratory Research, Amgen Inc., Thousand Oaks, CA, 91320, USA\*\*USA  
JOURNAL: International Immunology 12 (10): p1439-1447 October, 2000 2000

MEDIUM: print  
ISSN: 0953-8178  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

6/3/11 (Item 11 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0012473461 BIOSIS NO.: 200000191774  
T-cell co-stimulation through **B7RP-1** and ICOS  
AUTHOR: **Yoshinaga Steven K** (Reprint); Whoriskey John S; Khare Sanjay  
D; Sarmiento Ulla; Guo Jane; Horan Tom; Shih Grace; Zhang Ming; Coccia  
Marco A; Kohno Tadahiko; Tafuri-Bladt Anna; Brankow David; Campbell  
Pauline; Chang David; Chiu Laura; Dai Tianang; Duncan Gordon; Elliott  
Gary S; Hui Ariela; McCabe Susan M; Scully Sheila; Shahinian Arda;  
Shaklee Christine L; Van Gwyneth; Mak Tak W; Senaldi Giorgio  
AUTHOR ADDRESS: Amgen Inc., One Amgen Center Drive, Thousand Oaks, CA,  
91320, USA\*\*USA  
JOURNAL: Nature (London) 402 (6763): p827-832 Dec. 16, 1999 1999  
MEDIUM: print  
ISSN: 0028-0836  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

6/3/12 (Item 1 from file: 155)  
DIALOG(R)File 155: MEDLINE(R)  
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12462993 PMID: 12833154  
Costimulation through the inducible costimulator ligand is essential for  
both T helper and B cell functions in T cell-dependent B cell responses.  
Mak Tak W; Shahinian Arda; **Yoshinaga Steve K**; Wakeham Andrew;  
Boucher Louis-Martin; Pintilie Melania; Duncan Gordon; Gajewska Beata U;  
Gronski Matthew; Eriksson Urs; Odermatt Bernhard; Ho Alexandra; Bouchard  
Denis; Whorisky John S; Jordana Manel; Ohashi Pamela S; Pawson Tony; Bladt  
Friedhelm; Tafuri Anna  
Advanced Medical Discovery Institute, and Ontario Cancer Institute,  
Department of Medical Biophysics, University of Toronto, Toronto, Ontario  
M5G 2C1, Canada. tmak@uhnres.utoronto.ca  
Nature immunology (United States) Aug 2003, 4 (8) p765-72, ISSN  
1529-2908 Journal Code: 100941354  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
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19041 B7  
1970607 L  
8 B7(W)L  
19041 B7  
76873 H2  
42 B7(W)H2  
19041 B7  
13792 H7  
0 B7(W)H7  
11 BSL3  
2463403 PD  
19530 L2  
116 PD(W)L2

23703 B7?  
S7 112 (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD(W)L2) AND B7?  
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...examined 50 records (50)  
...examined 50 records (100)  
...completed examining records  
S8 66 RD S7 (unique items)  
? s s8 and py<2002  
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Processing  
66 S8  
51170825 PY<2002  
S9 15 S8 AND PY<2002  
? t s9/7/all

9/7/1 (Item 1 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0013557974 BIOSIS NO.: 200200151485  
The role of in vivo PD-1/PD-L1 interactions in syngeneic and allogeneic  
antitumor responses in murine tumor models  
AUTHOR: Zuberek Krystyna (Reprint); Runyon Kathlene (Reprint); Collins Mary  
(Reprint); Leonard John P (Reprint); Dunussi-Joannopoulos Kyri (Reprint)  
AUTHOR ADDRESS: Immunology, Genetics Institute/Wyeth-Ayerst Research,  
Cambridge, MA, USA\*\*USA  
JOURNAL: Blood 98 (11 Part 2): p42b November 16, 2001 2001  
MEDIUM: print  
CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of  
Hematology, Part 2 Orlando, Florida, USA December 07-11, 2001; 20011207  
SPONSOR: American Society of Hematology  
ISSN: 0006-4971  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: PD-1 is a transmembrane protein containing an immunoreceptor tyrosine-based inhibitory motif, and is expressed on activated lymphoid and myeloid cells. Studies using PD-1-deficient mice have shown that PD-1 is involved in the maintenance of peripheral self-tolerance by negatively regulating immune responses. Two new members of the \*\*\*B7\*\*\* gene family, PD-L1 and \*\*\*PD\*\*\* - \*\*\*L2\*\*\*, have been identified as ligands for PD-1. Engagement of PD-1 by PD-L1 inhibits T cell receptor-mediated proliferation of T cells and cytokine secretion. We have demonstrated that PD-L1 is constitutively expressed in murine tumor cells, and that this expression is highly regulated in vitro by IFN- $\gamma$ . Therefore, we speculated that in vivo PD-1/PD-L1 interactions may downregulate antitumor immune responses leading to ineffective tumor immunosurveillance. In this report we studied the role of in vivo PD-1/PD-L1 interactions in various murine tumor models. We have used either recombinant costimulatory fusion proteins for systemic treatment, or retrovirally transduced tumor cells, co-expressing green fluorescent protein (GFP) and PD-1 or PD-L1. Our results demonstrate: (i) systemic treatment of MethA or MB49 inoculated mice with soluble PDL1-Fc fusion protein (50ug/injection twice weekly, for 3 weeks) does not alter the pattern of in vivo tumor growth as compared to treatment with control IgG; (ii) treatment with PDL1-Fc or control IgG during the priming/effector phase in a B16F1 vaccination model leads to 20% protection against wild-type (wt) challenge; (iii) live wt or PD-L1 transduced MethA cells do not downregulate in vivo antitumor responses, and are rejected by either naive allogeneic recipients (C57BL/6, SJL/J), or by syngeneic recipients (Balb/c) with antitumor memory CTL; similarly, PD-L1 expressing MethA cells cultured in vitro with allogeneic T cells do not significantly downregulate T cell proliferation when

compared to GFP or PD-1 expressing MethA cells; (iv) mice vaccinated once with irradiated PDL1- or GFP-B16F1 cells and challenged a week later with live wt B16F1 cells show 20% protection; and (v) live wt B16F1, GFP-, and PD-L1-tranduced B16F1 cells are rejected by syngeneic B cell-deficient C57BL/6 mice. Overall, our results suggest that in vivo PD-1/PD-L1 interactions do not have a clinically detectable downregulatory effect on immune mechanisms regulating tumor growth or tumor rejection.

9/7/2 (Item 2 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0013238309 BIOSIS NO.: 200100410148  
**PD-L2** is a second ligand for PD-1 and inhibits T cell activation  
AUTHOR: Latchman Yvette; Wood Clive R; Chernova Tatyana; Chaudhary Divya; Borde Madhuri; Chernova Irene; Iwai Yoshiko; Long Andrew J; Brown Julia A; Nunes Raquel; Greenfield Edward A; Bourque Karen; Boussiotis Vassiliki A; Carter Laura L; Carreno Beatriz M; Malenkovich Nelly; Nishimura Hiroyuki; Okazaki Taku; Honjo Tasuku; Sharpe Arlene H; Freeman Gordon J (Reprint)  
AUTHOR ADDRESS: Department of Adult Oncology, Department of Medicine, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, 02115, USA\*\*USA  
JOURNAL: Nature Immunology 2 (3): p261-268 March, 2001 2001  
MEDIUM: print  
ISSN: 1529-2908  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: Programmed death 1 (PD-1)-deficient mice develop a variety of autoimmune-like diseases, which suggests that this immunoinhibitory receptor plays an important role in tolerance. We identify here PD-1 ligand 2 (**PD-L2**) as a second ligand for PD-1 and compare the function and expression of PD-L1 and \*\*\*PD\*\*\* - \*\*\*L2\*\*\*. Engagement of PD-1 by **PD-L2** dramatically inhibits T cell receptor (TCR)-mediated proliferation and cytokine production by CD4+ T cells. At low antigen concentrations, **PD-L2**-PD-1 interactions inhibit strong \*\*\*B7\*\*\* -CD28 signals. In contrast, at high antigen concentrations, **PD-L2**-PD-1 interactions reduce cytokine production but do not inhibit T cell proliferation. PD-L-PD-1 interactions lead to cell cycle arrest in G0/G1 but do not increase cell death. In addition, ligation of PD-1+TCR leads to rapid phosphorylation of SHP-2, as compared to TCR ligation alone. PD-L expression was up-regulated on antigen-presenting cells by interferon gamma treatment and was also present on some normal tissues and tumor cell lines. Taken together, these studies show overlapping functions of PD-L1 and **PD-L2** and indicate a key role for the PD-L-PD-1 pathway in regulating T cell responses.

9/7/3 (Item 3 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0013106826 BIOSIS NO.: 200100278665  
**PD-L2**, a novel **B7** homologue, is a second ligand for PD-1 and inhibits T cell activation  
AUTHOR: Latchman Yvette (Reprint); Wood Clive; Chernova Tatyana; Iwai Yoshiko; Malenkovich Nelly; Long Andrew; Bourque Karen; Boussiotis Vassiliki; Nishimura Hiroyuki; Honjo Tasuku; Sharpe Arlene (Reprint); Freeman Gordon

AUTHOR ADDRESS: Brigham and Womens Hospital and Harvard Medical School, 221 Longwood Ave, LMRC-5, Boston, MA, 02115, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: PD-1 is a member of the immunoglobulin superfamily and CD28 homologue which contains an immunoreceptor tyrosine-based inhibitory motif (ITIM), in its cytoplasmic tail. PD-1 deficient mice develop a variety of autoimmune diseases suggesting that this immunoinhibitory receptor plays an important role in tolerance. Recently, a \*\*\*B7\*\*\* homologue, PD-1 ligand 1 (PD-L1) has been identified as a ligand for PD-1. Here we present the initial identification and characterization of a novel B7 homologue, **PD-L2**, that is a second ligand for PD-1, and compare the expression and function of PD-L1 and **PD-L2**. Murine \*\*\*PD\*\*\* - \*\*\*L2\*\*\* shares 38% amino acid identity to murine PD-L1. Distribution of human and murine \*\*\*PD\*\*\* - \*\*\*L2\*\*\* mRNAs in normal tissues is similar to PD-L1 with high levels in placenta, and low levels in spleen, lymph nodes, and thymus. In addition, some tissues, such as human pancreas, lung and liver, expressed **PD-L2** but not PD-L1. \*\*\*PD\*\*\* - \*\*\*L2\*\*\* mRNA was not detected in unstimulated human monocytes but was upregulated by IFN-gamma stimulation. The induction of **PD-L2** was slightly delayed in kinetics as compared to the upregulation of PD-L1. Engagement of PD-1 by \*\*\*PD\*\*\* - \*\*\*L2\*\*\* dramatically inhibits TCR mediated proliferation and cytokine production by CD4+ T cells. At low antigen concentrations, \*\*\*PD\*\*\* - \*\*\*L2\*\*\* :PD-1 interaction inhibits strong \*\*\*B7\*\*\* :CD28 signals. In contrast, at high antigen concentrations, **PD-L2**:PD-1 interaction markedly reduced cytokine production but does not inhibit T cell proliferation. These results further demonstrate the capacity of the PD-L:PD-1 pathways to antagonize a strong B7/CD28 signal when antigenic stimulation is weak or limiting. PD-L:PD-1 interactions lead to cell cycle arrest in G0/G1, but do not increase cell death. Taken together, these studies demonstrate overlapping functions of PD-L1 and **PD-L2** and indicate a key role for the PD-L1/**PD-L2**:PD-1 pathway in regulating T cell responses.

9/7/4 (Item 4 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0013106825 BIOSIS NO.: 200100278664

Expression and functional consequences of PD-1 ligands on natural APCS and tumors

AUTHOR: Brown Julia A (Reprint); Dorfman David M; Butler Marcus (Reprint); Nunes Raquel (Reprint); Latchman Yvette; Long Andrew J; Iwai Yoshiko; Bourque Karen; Boussiotis Vassiliki A (Reprint); Chernova Tatyana (Reprint); Nishimura Hiroyuki; Fitz Lori; Malenkovich Nelly (Reprint); Honjo Tasuku; Wood Clive R; Nadler Lee M (Reprint); Sharpe Arlene H; Freeman Gordon J (Reprint)

AUTHOR ADDRESS: Dana-Farber Cancer Institute, 44 Binney St, Boston, MA, 02115, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: PD-1 is a cell surface receptor structurally related to CD28 and CTLA4 and is expressed on activated lymphoid and myeloid cells. PD-1 contains an ITIM motif and has a role in the negative regulation of immune responses. Mice deficient in PD-1 have multiple autoimmune features and appear to have a breakdown in peripheral tolerance. We have identified two novel members of the **B7** gene family, PD-L1 and \*\*\*PD\*\*\* - \*\*\*L2\*\*\*, as ligands of PD-1. Engagement of PD-1 by PD-Ligand dramatically inhibits TCR stimulated proliferation and cytokine production by T cells. Immunohistochemistry with PD-L1 specific mAb showed that PD-L1 is highly expressed in several organs including placental trophoblasts, myocardial endothelial lining, and thymic epithelial cells. PD-L1 is not expressed on unstimulated antigen presenting cells but is induced on dendritic cells and monocytes by pro-inflammatory cytokines such as interferon- $\gamma$  suggesting a role for PD-L1 in limiting T cell responses. PD-L1 is also expressed on some tumors including most lung and breast malignancies and many ovarian tumors, suggesting a role in attenuating immune attack against these tumors. Blockade of PD-L1 led to modestly increased proliferation and substantial increases in cytokine production. The relative levels of inhibitory PD-L1 and stimulatory **B7**-1 and **B7**-2 molecules on antigen presenting cells may determine the threshold between tolerance and autoimmunity. PD-Ligand expression on tumors may allow them to attenuate an anti-tumor immune response. This discovery extends the **B7** family of molecules and their role in immunoregulation and identifies new targets for therapeutic modulation of the immune response.

9/7/5 (Item 5 from file: 5)

DIALOG(R) File 5: Biosis Previews(R)

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0013106824 BIOSIS NO.: 200100278663

**B7**-H3, a novel member of the **B7** family that costimulates T cell responses and selectively enhances interferon-gamma production

AUTHOR: Chapoval Andrei I (Reprint); Ni Jian; Lau Julie S (Reprint); Wilcox Ryan A (Reprint); Flies Dallas B (Reprint); Liu Ding; Dong Haidong (Reprint); Sica Gabriel L (Reprint); Zhu Gefeng (Reprint); Tamada Koji (Reprint); Chen Lieping (Reprint)

AUTHOR ADDRESS: Mayo Clinic, 200 First Street SW, Rochester, MN, 55905, USA  
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JOURNAL: FASEB Journal 15 (4): pa345 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Costimulation, in addition to TCR engagement, is required for optimal activation of T cells. The most extensively studied costimulatory molecules belong to the **B7** family, which includes well known (**B7**-1 and **B7**-2) and recently described (**B7**-H1 and \*\*\*B7\*\*\* - \*\*\*H2\*\*\*) molecules. We discovered a novel member of the human **B7** family, designated **B7**-H3 that shares 20-27% amino acid identity with other \*\*\*B7\*\*\* family members. \*\*\*B7\*\*\* -H3 mRNA was not detectable in peripheral blood mononuclear cells although it was found in various normal tissues and in several tumor lines. \*\*\*B7\*\*\* -H3 was expressed on the surface of GM-CSF derived macrophages and IFN-gamma

stimulated dendritic cells. In addition, stimulation by a combination of phorbol myristate acetate and ionomycin induces surface expression of \*\*\*B7\*\*\* -H3 on CD3+ T cells. Soluble \*\*\*B7\*\*\* -H3 protein bound a putative counter-receptor on PHA-activated T cells distinct from CD28, CTLA-4, ICOS, and PD-1. \*\*\*B7\*\*\* -H3 costimulated proliferation of both CD4+ and CD8+ T cells, enhanced the induction of cytotoxic T cells, and selectively enhanced IFN-gamma production in the presence of T cell receptor signaling. Thus, our results identified additional \*\*\*B7\*\*\* family molecule that may participate in the regulation of cell-mediated immune responses.

9/7/6 (Item 6 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0013106812 BIOSIS NO.: 200100278651  
Costimulation of tumor immunity by **B7-H2**, a ligand for ICOS  
AUTHOR: Wang Shengdian (Reprint); Zhu Gefeng (Reprint); Wilcox Ryan  
(Reprint); Chen Lieping (Reprint)  
AUTHOR ADDRESS: Mayo Clinic, 200 First Street, SW, Rochester, MN, 55905,  
USA\*\*USA  
JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001  
MEDIUM: print  
CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies  
for Experimental Biology on Experimental Biology 2001 Orlando, Florida,  
USA March 31-April 04, 2001; 20010331  
ISSN: 0892-6638  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: Costimulatory interactions between the **B7** family ligands and their receptors play critical roles in the growth, differentiation, and death of T cells. We have recently identified a new member of \*\*\*B7\*\*\* family designated as \*\*\*B7\*\*\* - \*\*\*H2\*\*\* . Human \*\*\*B7\*\*\* - \*\*\*H2\*\*\* is a type 1 transmembrane protein with apprx24%, apprx21% and apprx21% amino acid identity to **B7-1**, **B7-2** and **B7-H1** respectively, but with apprx46% amino acid identity to mouse **B7h**/ **B7RP-1**, FACS analysis showed that **B7-H2** protein is expressed on the surface of monocyte-derived immature dendritic cells. **B7-H2**Ig binds ICOS on activated T cells and costimulates T-cell proliferation in the presence of suboptimal cross-linking CD3. A moderate increase of IL-10 production was only observed in the culture when optimal doses, but not suboptimal doses of anti-CD3 mAb was used, whereas **B7-H2** costimulation moderately increased the production of IL-2 in the presence of suboptimal or optimal doses of CD3 signal. Administration of \*\*\*B7\*\*\* -H2Ig enhances CTL activity against E.G7 tumor cells and expands E.G7-specific CD8+ T cells in vivo. Our study identifies a putative ligand for ICOS T-cell costimulatory molecule and suggests a regulatory function of **B7-H2**/ICOS interaction in the cell-mediated tumor immunity.

9/7/7 (Item 7 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0013104890 BIOSIS NO.: 200100276729  
Characterization of ICOS-ligand splice variants  
AUTHOR: Ling Vincent (Reprint); Wu Paul W (Reprint); Miyashiro Joy S  
(Reprint); Marusic Suzana (Reprint); Finnerty Heather F (Reprint);  
Collins Mary (Reprint)

AUTHOR ADDRESS: Genetics Institute, 87 Cambridge Park Drive, Cambridge, MA, 02140, USA\*\*USA  
JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001  
MEDIUM: print  
CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331  
ISSN: 0892-6638  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: The process of immunological costimulation between antigen presenting cells and T-cells is mediated by **B7**/CD28 and ICOS-ligand/ICOS receptor interactions. In this study, we describe the 3' RACE cloning of a novel ICOS-ligand transcript variant, GL50-B, in addition to the previously reported mouse ICOS-ligand GL50 (Genbank AF199027). mGL50-B encodes a protein product with a divergent 27 amino acid intracellular domain when compared to mGL50. Both mGL50 and mGL50-B transfected cells exhibited binding to human and mouse ICOS-lg fusion protein indicating that the alternate cytoplasmic domain of mGL50-B does not prevent interactions with ICOS receptor. Whereas mGL50 hybridization signal is detected in all tissues examined by RNA blot analysis, mGL50-B transcripts were primarily detected in spleen, ES cell and embryonic tissue samples with lower levels detected in heart and kidney samples. Flow cytometry of Balb/C and RAG1 -/- mouse splenocyte subsets using ICOS-Ig combined with RT-PCR analysis of either CD19+, CD4+, CD11b+ or CD11c+ enriched cell populations demonstrated that freshly isolated B-cells, T-cells, macrophage and dendritic cells express both GL50 and GL50-B ICOS-ligand variants. Comparative analysis of the human ICOS-ligand splice variants hGL50 (AF199028) and **B7-H2** (AF289028) by RT-PCR revealed a broad tissue distribution of **B7-H2** transcripts while hGL50 transcripts were detected mainly in lymph node, leukocyte and splenic RNA samples. The presence of multiple ICOS-ligand splice variants in mouse and humans systems suggests that tissue-specific splice variation may be a method of signal control in the ICOS pathway of the immune system.

9/7/8 (Item 8 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0012796803 BIOSIS NO.: 200000515116  
Costimulation of T cells by **B7-H2**, a **B7**-like molecule that binds ICOS  
AUTHOR: Wang Shengdian; Zhu Gefeng; Chapoval Andrei I; Dong Haidong; Tamada Koji; Ni Jian; Chen Lieping (Reprint)  
AUTHOR ADDRESS: Department of Immunology, Mayo Clinic, 200 First St SW, Rochester, MN, 55905, USA\*\*USA  
JOURNAL: Blood 96 (8): p2808-2813 October 15, 2000 2000  
MEDIUM: print  
ISSN: 0006-4971  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: This report describes a new human **B7**-like gene designated \*\*\*B7\*\*\* - \*\*\*H2\*\*\*. Cell surface expression of \*\*\*B7\*\*\* - \*\*\*H2\*\*\* protein is detected in monocyte-derived immature dendritic cells. Soluble **B7-H2** and immunoglobulin (Ig) fusion protein, **B7-H2Ig**, binds activated but not resting T cells and the binding is abrogated by inducible costimulator Ig (ICOSIg), but not CTLA4Ig. In addition, ICOSIg

stains Chinese hamster ovary cells transfected with **B7-H2** gene. By suboptimal cross-linking of CD3, costimulation of T-cell proliferation by **B7-H2Ig** is dose-dependent and correlates with secretion of interleukin (IL)-2, whereas optimal CD3 ligation preferentially stimulates IL-10 production. The results indicate that \*\*\*B7\*\*\* - \*\*\*H2\*\*\* is a putative ligand for the ICOS T-cell molecule.

9/7/9 (Item 9 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0010521169 BIOSIS NO.: 199699155229  
Allogeneic lymphocyte responses to **B7-1** expressing human cancer cell lines  
AUTHOR: Dessureault Sophie; Gallinger Steven (Reprint)  
AUTHOR ADDRESS: Mt. Sinai Hosp., 1225-600 University Ave., Toronto, ON M5G 1X5, Canada\*\*Canada  
JOURNAL: Journal of Surgical Research 64 (1): p42-48 1996 1996  
ISSN: 0022-4804  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

**ABSTRACT:** Recent studies suggest that expression of **B7-1** by tumor cells is effective at inducing antitumor immune responses. Our purpose was to transfect three human cancer cell lines (MEWO, WM35, and H125) with a **B7-1** expression plasmid and test the immunogenicity of these modified cancer cells using allogeneic human peripheral blood lymphocytes (PBLs). PBLs were tested in vitro for both proliferative and cytotoxic activity against parental and \*\*\*B7\*\*\* -transfected tumor cells. (3H)thymidine lymphocyte proliferation assays showed that PBLs incubated with **B7-1** WM35 (major histocompatibility complex (MHC) class I-II- melanoma) demonstrated a substantial increase in T cell proliferation ( $P < 0.0005$ ), but PBLs incubated with \*\*\*B7\*\*\* -1MEWO (MHC class I-II melanoma) and H125 (MHC class I+II- lung adenosquamous carcinoma) did not. T cell-mediated cytotoxicity was not increased against **B7-1** tumor cells: effector T lymphocytes primed against **B7-1** tumor cells did not show any increase in cytolytic activity against 51Cr-labeled \*\*\*B7\*\*\* -1+ or \*\*\*B7\*\*\* -1 target cells. NK cells did not lyse MEWO cells, but they did kill H125 and WM35 targets. \*\*\*B7\*\*\* -1 expression on MEWO and WM35 cells did not result in enhanced lysis by NK cells, but NK cytotoxicity was enhanced by **B7-1** expression on H125 cells ( $P < 0.01$ ). The observation that NK cytotoxicity is enhanced by **B7-1** H125 cells suggests that **B7-1/CD28** interactions may be important in NK cytotoxic activity. We conclude that \*\*\*B71\*\*\* -WM35 cells, which express both MHC molecules and antigenic epitopes, elicit an improved alloantigen-induced T cell proliferative response, presumably because they have the capacity to deliver an adequate antigen-specific signal which can be costimulated by \*\*\*B7\*\*\* -1/CD28 interaction.

9/7/10 (Item 10 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0010161812 BIOSIS NO.: 199698629645  
Maturation of neonatal human CD4 T cells: III. Role of \*\*\*B7\*\*\* co-stimulation at priming  
AUTHOR: Yang Liang-Peng; Demeure Christian E; Byun Dae-Gyoo; Vezzio Nadia; Delespesse Guy (Reprint)  
AUTHOR ADDRESS: Allergy Res. Lab., Cent. Recherche Louis-Charles Simard, Notre-Dame Hosp., Univ. Montreal, 1560 Sherbrooke St. East, Montreal, Quebec H2L 4M1, Canada\*\*Canada

JOURNAL: International Immunology 7 (12): p1987-1993 1995 1995

ISSN: 0953-8178

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: We previously reported that human naive CD4 T cells differentiate into effector cells producing type 1 (IL-2, IFN-gamma) and type 2 (IL-4, IL-5, IL-10) cytokines after priming with anti-CD3 mAb presented on irradiated CD32-transfected mouse L fibroblasts, in the absence of exogenous cytokine. Here we first show that the CD32 L fibroblasts act not only by cross-linking anti-CD3 mAb but also by providing a **B7**-mediated co-stimulation signal which is required for the activation of naive T cells. Using a selected anti-CD3 mAb (64.1) we next demonstrate that colligation of CD3 and CD28 with soluble mAb is sufficient to activate highly purified naive CD4 T cells for proliferation, IL-4 mRNA expression, IL-4 secretion, and maturation into IL-4- and IL-5-producing cells. Finally, we show that the intensity of \*\*\*B7\*\*\* co-stimulation at priming markedly affects the lymphokine-producing phenotype of primed cells. Indeed, cells primed on CD32- \*\*\*B7\*\*\* double L transfectants produce much more IL-4 and IL-5 and slightly less IFN-gamma than those primed on CD32 L cells. The enhanced IL-4/IL-5-producing capacity of cells primed on CD32-**B7** L fibroblasts may be related to increased IL-4 production during priming. It is suggested that the maturation of naive T cells along the T-h2 or T-h1 pathway may be regulated by the level of \*\*\*B7\*\*\* expressed on APC.

9/7/11 (Item 11 from file: 5)

DIALOG(R) File 5: Biosis Previews(R)

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0007103574 BIOSIS NO.: 199089021465

SYNTHESIS OF A7 **B7** DICARBAINSULIN AN ANALOGUE WITH A NONCLEAVABLE

BOND BETWEEN A AND B-CHAIN II. SYNTHESIS OF THE A-CHAIN SEGMENTS

AUTHOR: VIDENOV G (Reprint); STOEV S; BRANDENBURG D

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JOURNAL: Biological Chemistry Hoppe-Seyler 370 (10): p1103-1112 1989

ISSN: 0177-3593

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

ABSTRACT: As part of the total synthesis of [A7, **B7**-L-L-2,7-diaminosuberoyl]-des-(B26-B30)-insulin B25-amide, an insulin analogue containing a non-cleavable bond between A- and B-chain, the chemical synthesis of the A-chain segment is described. The N-terminal sequence A(1-6), Boc-Gly-Ile-Val-Glu-(OBu)-Gln-Cys(SBu)-NH-NH2, was synthesized in solution. The middle segment A(98-16), Ddz-Thr(Bu)-Ser(Bu)-Ile-Cys(SBu)-Ser(Bu)-Leu-Tyr-(Bu)-Gln-Leu-NH-NH2, was obtained by solid phase synthesis according to the Fmoc strategy. The C-terminal segment A(17-21), Bpoc-Glu(OBu)-Asn-Tyr-Cys(Acm)-AsnOBu, was prepared in solution.

9/7/12 (Item 1 from file: 73)

DIALOG(R) File 73: EMBASE

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11189331 EMBASE No: 2001208376

Differential expression of inducible costimulator-ligand splice variants:

Lymphoid regulation of mouse GL50-B and human GL50 molecules

Ling V.; Wu P.W.; Miyashiro J.S.; Marusic S.; Finnerty H.F.; Collins M.

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Journal of Immunology ( J. IMMUNOL. ) (United States) 15 JUN 2001,  
166/12 (7300-7308)  
CODEN: JOIMA ISSN: 0022-1767  
DOCUMENT TYPE: Journal ; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 29

The process of immunological costimulation between APC and T cells is mediated by protein ligand:receptor interactions. To date, costimulatory receptors known to be expressed by T cells include the structurally related proteins CD28 and the inducible costimulator (ICOS). The ligands to human and mouse ICOS, human GL50 (hGL50), and mouse GL50 (mGL50) were recently cloned and demonstrated to have sequence similarity to the CD28 ligands

\*\*\*B7\*\*\* -1 and \*\*\*B7\*\*\* -2. Examination of mGL50 cDNA transcripts by 3primeRACE revealed an alternatively spliced form, mGL50-B, that encoded a protein product with a divergent 27-aa intracellular domain. Both mGL50- and mGL50-B-transfected cells exhibited binding to human and mouse ICOS-Ig fusion protein, indicating that the alternate cytoplasmic domain of mGL50-B does not interfere with extracellular interactions with ICOS receptor. Flow cytometric and RT-PCR analysis of BALB/c and RAG1SUP-/- mice splenocytes demonstrate that freshly isolated B cells, T cells, macrophages, and dendritic cells express both splice variant forms of ICOS ligand. Comparative analyses with the human ICOS ligand splice variants hGL50 and B7-H2 indicate that differential splicing at the junction of cytoplasmic exon 6 and exon 7 may be a common method by which GL50-ICOS immunological costimulatory processes are regulated in vivo.

9/7/13 (Item 2 from file: 73)  
DIALOG(R)File 73:EMBASE  
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07673780 EMBASE No: 1999136316  
Enhancement of B7-1 (CD80) expression on B-lymphoma cells by  
irradiation  
Seo A.; Ishikawa F.; Nakano H.; Nakazaki H.; Kobayashi K.; Kakiuchi T.  
Dr. T. Kakiuchi, Department of Immunology, Toho University School of  
Medicine, 5-21-16 Omori-nishi, Ota-ku, Tokyo 143-8540 Japan  
Immunology ( IMMUNOLOGY ) (United Kingdom) 1999, 96/4 (642-648)  
CODEN: IMMUA ISSN: 0019-2805  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 40

Irradiation of A20.2J mouse B-lymphoma cells enhanced their antigen-presenting ability to induce interleukin-2 (IL-2) production by 42-6A T cells specific for ovalbumin (OVA)inf 3inf 2inf 3inf -inf 3inf 3inf 9/I-A(d). Irradiated and fixed A20.2J cells were more efficient antigen-presenting cells (APC) to present OVAinf 3inf 2inf 3inf -inf 3inf 3inf 9 peptide than the unirradiated and fixed cells. Irradiation selectively increased the expression of B7-1 molecules, but not of the major histocompatibility complex class II molecules, B7-2, lymphocyte function- associated antigen-1, or intracellular adhesion molecule-1. Irradiation of A20.2J cells with 100 Gy followed by overnight incubation was optimal for the enhancement of \*\*\*B7\*\*\* -1 expression. Anti-B7-1 monoclonal antibody inhibited the irradiation-induced enhancement of APC function. Irradiation of A20.2J cells induced the accumulation of \*\*\*B7\*\*\* -1 mRNA. Thus, it was concluded that the enhancement of APC function by irradiation was due to the up-regulation of \*\*\*B7\*\*\* - \*\*\*1\*\*\* molecules through the accumulation of its mRNA. Although partial inhibition of protein synthesis has been shown to enhance the

accumulation of B7-1 mRNA and its expression, irradiation did not decrease the protein synthesis in A20.2J cells. The incubation with irradiated A20.2J cells stimulated unirradiated A20.2J cells to increase \*\*\*B7\*\*\* -1 expression, suggesting that irradiation of A20.2J cells induced expression or secretion of some molecule(s) to enhance B7-1 expression.

9/7/14 (Item 3 from file: 73)  
DIALOG(R) File 73:EMBASE  
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07459262 EMBASE No: 1998377904  
L-selectin and beta7 integrin synergistically mediate lymphocyte migration to mesenteric lymph nodes  
Wagner N.; Lohler J.; Tedder T.F.; Rajewsky K.; Muller W.; Steeber D.A.  
N. Wagner, Institute for Genetics, University of Cologne, Weyertal 121,  
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European Journal of Immunology ( EUR. J. IMMUNOL. ) (Germany) 1998,  
28/11 (3832-3839)  
CODEN: EJIMA ISSN: 0014-2980  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 31

Mesenteric lymph nodes (MLN) drain the gut where nutritive antigens and pathogens are encountered by lymphocytes of the gut-associated lymphoid tissue. We sought to determine how lymphocytes enter the MLN by studying mice double deficient for beta7 integrins and L-selectin. \*\*\*B7\*\*\* / \*\*\*L\*\*\* -selectin double-deficient lymphocytes did not migrate into MLN. Most importantly, MLN formation was drastically impaired in beta7/L-selectin double-deficient mice. Lymphocyte numbers in MLN from beta7/L-selectin double-deficient mice were tenfold reduced compared to control mice. A high percentage of the few lymphocytes still detected in MLN from beta7/L-selectin double-deficient mice were CD44(hi)CD18(hi), suggesting alternate migration pathways independent of L-selectin and beta7 integrin for these cells. We conclude that the combination of both molecules, L-selectin and beta7 integrin, is indispensable for MLN formation and that these molecules may mediate lymphocyte migration to MLN in a sequential and synergistical manner.

9/7/15 (Item 1 from file: 399)  
DIALOG(R) File 399:CA SEARCH(R)  
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134218032 CA: 134(16)218032u PATENT  
Cloning and characterization of a B7 homolog 3 (B7-H3) protein and its therapeutic application  
INVENTOR(AUTHOR): Ruben, Steven M.; Chen, Lieping; Baker, Kevin; Ni, Jian  
LOCATION: USA  
ASSIGNEE: Human Genome Sciences, Inc.; Mayo Clinic  
PATENT: PCT International ; WO 200118021 A1 DATE: 20010315  
APPLICATION: WO 2000US23792 (20000830) \*US PV152317 (19990903) \*US  
PV200346 (20000428)  
PAGES: 252 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A;  
C12N-001/21B; C12N-015/00B; C12N-015/63B; C07K-014/46B; C07K-014/52B;  
A61K-038/00B; C12Q-001/68B; G01N-033/53B DESIGNATED COUNTRIES: AE; AG; AL;  
AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CR; CU; CZ; DE; DK; DM;  
DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP;  
KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ;  
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ;  
VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH

; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

SECTION:

CA203003 Biochemical Genetics

CA201XXX Pharmacology

CA213XXX Mammalian Biochemistry

CA215XXX Immunochemistry

IDENTIFIERS: human B7 homolog 3 B7H3 cDNA sequence, T cell activation costimulatory receptor B7H3

DESCRIPTORS:

T cell(lymphocyte)...

activation in the presence of B7-H3; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Antigens...

B7-H2/GL50; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Antigens...

B7-H3, of human; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Immunoglobulins...

B7-H3 Ig, for T cell activation; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Antigens...

B7-1H; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Glycoproteins, specific or class...

CD40-L (antigen CD40 ligand), receptor for, costimulation in the presence of B7-H3; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Antibodies... CD80(antigen)... CD86(antigen)... Cell proliferation... Drug screening... Gene therapy... Molecular cloning... Nucleic acid hybridization... Primers(nucleic acid)... Probes(nucleic acid)... TCR(T cell receptors)...

cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

cDNA sequences... Gene,animal...

for Antigen B7-H3, of human; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

TCR(T cell receptors)...

for OX40, costimulation in the presence of B7-H3; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Cytokines...

inflammatory; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Diagnosis...

mol.; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Protein sequences...

of Antigen B7-H3, of human; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

mRNA...

of B7-H3, tissue distribution; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

Receptors...

4-1BB, costimulation in the presence of B7-H3; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

CAS REGISTRY NUMBERS:

328597-16-6P amino acid sequence; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

328596-73-2 nucleotide sequence; cloning and characterization of a B7 homolog 3 (B7-H3) protein and therapeutic application

229477-44-5 328596-22-1 unclaimed nucleotide sequence; cloning and characterization of a B7 homolog 3 (B7-H3) protein and its therapeutic application  
328601-76-9 329752-99-0 329753-00-6 unclaimed protein sequence; cloning and characterization of a B7 homolog 3 (B7-H3) protein and its therapeutic application  
328529-70-0 329685-07-6 329753-02-8 329753-03-9 329753-04-0  
329753-05-1 unclaimed sequence; cloning and characterization of a B7 homolog 3 (B7-H3) protein and its therapeutic application

? ds

Set	Items	Description
S1	30	E3-E6
S2	29	RD S1 (unique items)
S3	28	E1-E5
S4	0	(S1 OR S3) AND (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD-(W)L2)
S5	17	(S1 OR S3) AND B7?
S6	12	RD S5 (unique items)
S7	112	(B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD(W)L2) AND B7?
S8	66	RD S7 (unique items)
S9	15	S8 AND PY<2002

? t s8/3/all

8/3/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014842386 BIOSIS NO.: 200400210019  
The low affinity IgE receptor, CD23, expressed on antigen presenting cells alters T-cell response to allergen.  
AUTHOR: Poole J A (Reprint); Meng J (Reprint); Cao L (Reprint); Bates C (Reprint); Rosenwasser L J (Reprint)  
AUTHOR ADDRESS: Allergy and Immunology, National Jewish Medical and Research Center, Denver, CO, USA\*\*USA  
JOURNAL: Journal of Allergy and Clinical Immunology 113 (2 Supplement): p S210 February 2004 2004  
MEDIUM: print  
CONFERENCE/MEETING: 60th Annual Meeting of the American Academy of Allergy, Asthma and Immunology (AAAAI) San Francisco, CA, USA March 19-23, 2004; 20040319  
SPONSOR: American Academy of Allergy, Asthma and Immunology  
ISSN: 0091-6749  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Citation  
LANGUAGE: English

8/3/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014794963 BIOSIS NO.: 200400162304  
Expression and role of B7 family molecules, B7-H1 and B7-\*\*\*H2\*\*\*, in patients with acute myeloid leukemia.  
AUTHOR: Tamura Hideto (Reprint); Ogata Kiyoyuki (Reprint); Yokose Norio (Reprint); Nakamura Kyoko (Reprint); Shioi Yumiko (Reprint); Hyodo Hideya (Reprint); Tachibana Mikiko (Reprint); Dong Haidong; Wang Shengdian; Chen Lieping (Reprint); Dan Kazuo  
AUTHOR ADDRESS: Third Department of Internal Medicine, Nippon Medical School, Tokyo, Japan\*\*Japan  
JOURNAL: Blood 102 (11): p234b November 16, 2003 2003  
MEDIUM: print  
CONFERENCE/MEETING: 45th Annual Meeting of the American Society of

Hematology San Diego, CA, USA December 06-09, 2003; 20031206  
SPONSOR: American Society of Hematology  
ISSN: 0006-4971  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/3 (Item 3 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014774682 BIOSIS NO.: 200400155439  
**B7-DC** regulates asthmatic response by an IFN-gamma-dependent mechanism.  
AUTHOR: Matsumoto Koichiro; Inoue Hiromasa (Reprint); Nakano Takako; Tsuda Miyuki; Yoshiura Yuki; Fukuyama Satoru; Tsushima Fumihiro; Hoshino Tomoaki; Aizawa Hisamichi; Akiba Hisaya; Pardoll Drew; Hara Nobuyuki; Yagita Hideo; Azuma Miyuki; Nakanishi Yoichi  
AUTHOR ADDRESS: Graduate School of Medical Sciences, Research Institute for Diseases of the Chest, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka, 812-8582, Japan\*\*Japan  
AUTHOR E-MAIL ADDRESS: inoue@kokyu.med.kyushu-u.ac.jp  
JOURNAL: Journal of Immunology 172 (4): p2530-2541 February 15, 2004 2004  
MEDIUM: print  
ISSN: 0022-1767 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/4 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014766525 BIOSIS NO.: 200400133879  
Costimulatory molecule expression by pediatric pre-B acute lymphoblastic leukemia cells.  
AUTHOR: Reid Gregor S D (Reprint); Wynne Kristin (Reprint); Terrett Luke (Reprint); Grubb Stacey (Reprint); Schultz Kirk R (Reprint)  
AUTHOR ADDRESS: Pediatrics, BC Children's Hospital and UBC, Vancouver, BC, Canada\*\*Canada  
JOURNAL: Blood 102 (11): p378a November 16, 2003 2003  
MEDIUM: print  
CONFERENCE/MEETING: 45th Annual Meeting of the American Society of Hematology San Diego, CA, USA December 06-09, 2003; 20031206  
SPONSOR: American Society of Hematology  
ISSN: 0006-4971  
DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/5 (Item 5 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014716299 BIOSIS NO.: 200400085068  
**B7-H1** and **B7-H2** expression and regulation in human placental trophoblast cells.  
AUTHOR: Petroff Margaret G (Reprint)  
AUTHOR ADDRESS: Department of Anatomy and Cell Biology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS, 66160, USA\*\*USA

JOURNAL: FASEB Journal 17 (7): pC318 April 14, 2003 2003  
MEDIUM: print  
CONFERENCE/MEETING: 90th Anniversary Annual Meeting of the American Association of Immunologists Denver, CO, USA May 06-10, 2003; 20030506  
SPONSOR: American Association of Immunologists  
ISSN: 0892-6638 \_ (ISSN print)  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Citation  
LANGUAGE: English

8/3/6 (Item 6 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0014661173 BIOSIS NO.: 200400031930  
BLOCKADE OF PD-L1, BUT NOT **PD-L2** SUPPRESSES THE DEVELOPMENT OF CHRONIC INTESTINAL INFLAMMATION.  
AUTHOR: Kanai Takanori (Reprint); Totsuka Teruji; Uraushihara Koji; Makita Shin; Iiyama Ryoichi; Tamura Miho; Nakamura Tetsuya; Hibi Toshifumi; Fukushima Tsuneo; Yagita Hideo; Azuma Miyuki; Chen Lieping; Watanabe Mamoru  
AUTHOR ADDRESS: Tokyo, Japan\*\*Japan  
JOURNAL: Digestive Disease Week Abstracts and Itinerary Planner 2003 p Abstract No. T1103 2003 2003  
MEDIUM: e-file  
CONFERENCE/MEETING: Digestive Disease 2003 FL, Orlando, USA May 17-22, 2003; 20030517  
SPONSOR: American Association for the Study of Liver Diseases  
American Gastroenterological Association  
American Society for Gastrointestinal Endoscopy  
Society for Surgery of the Alimentary Tract  
DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/7 (Item 7 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0014649374 BIOSIS NO.: 200400016358  
Blockade of **B7-H1** suppresses the development of chronic intestinal inflammation.  
AUTHOR: Kanai Takanori (Reprint); Totsuka Teruji; Uraushihara Koji; Makita Shin; Nakamura Tetsuya; Koganei Kazutaka; Fukushima Tsuneo; Akiba Hisaya; Yagita Hideo; Okumura Ko; Machida Utako; Iwai Hideyuki; Azuma Miyuki; Chen Lieping; Watanabe Mamoru  
AUTHOR ADDRESS: Department of Gastroenterology and Hepatology, Graduate School, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo, 113-8519, Japan\*\*Japan  
AUTHOR E-MAIL ADDRESS: taka.gast@tmd.ac.jp  
JOURNAL: Journal of Immunology 171 (8): p4156-4163 October 15, 2003 2003  
MEDIUM: print  
ISSN: 0022-1767 \_ (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/8 (Item 8 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0014622434 BIOSIS NO.: 200300573111  
THE EXPRESSION OF CO-STIMULATORY MOLECULES **B7H** AND **B7-H1** ON  
COLONIC EPITHELIAL CELLS AND THEIR FUNCTIONAL ROLE IN T CELL ACTIVATION.  
AUTHOR: Nakazawa Atsushi (Reprint); Dotan Iris; Brimnes Jens; Allez  
Matthieu; Azuma Miyuki; Mayer Lloyd  
AUTHOR ADDRESS: New York, NY, USA\*\*USA  
JOURNAL: Digestive Disease Week Abstracts and Itinerary Planner 2003 p  
Abstract No. S1119 2003 2003  
MEDIUM: e-file  
CONFERENCE/MEETING: Digestive Disease 2003 FL, Orlando, USA May 17-22, 2003; 20030517  
SPONSOR: American Association for the Study of Liver Diseases  
American Gastroenterological Association  
American Society for Gastrointestinal Endoscopy  
Society for Surgery of the Alimentary Tract  
DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/9 (Item 9 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014594697 BIOSIS NO.: 200300551128  
Endothelial expression of PD-L1 and **PD-L2** down-regulates CD8+ T cell activation and cytolysis.  
AUTHOR: Rodig Nancy; Ryan Timothy; Allen Jessica A; Pang Hong; Grabie Nir; Chernova Tatyana; Greenfield Edward A; Liang Spencer C; Sharpe Arlene H; Lichtman Andrew H (Reprint); Freeman Gordon J  
AUTHOR ADDRESS: Department of Pathology, Brigham and Women's Hospital, 75 Francis St, Boston, MA, 02115, USA\*\*USA  
AUTHOR E-MAIL ADDRESS: alichtman@rics.bwh.harvard.edu  
JOURNAL: European Journal of Immunology 33 (11): p3117-3126 November 2003  
2003  
MEDIUM: print  
ISSN: 0014-2980 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/10 (Item 10 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014569419 BIOSIS NO.: 200300524316  
Preferential contribution of **B7-H1** to programmed death-1-mediated regulation of hapten-specific allergic inflammatory responses.  
AUTHOR: Tsushima Fumihiko; Iwai Hideyuki; Otsuki Noriko; Abe Masaaki; Hirose Sachiko; Yamazaki Tomohide; Akiba Hisaya; Yagita Hideo; Takahashi Yuzo; Omura Ken; Okumura Ko; Azuma Miyuki (Reprint)  
AUTHOR ADDRESS: Department of Molecular Immunology, Graduate School, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo, 113-8549, Japan\*\*Japan  
AUTHOR E-MAIL ADDRESS: miyuki.mim@tmd.ac.jp  
JOURNAL: European Journal of Immunology 33 (10): p2773-2782 October 2003  
2003  
MEDIUM: print  
ISSN: 0014-2980 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/11 (Item 11 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014569411 BIOSIS NO.: 200300524308  
Regulation of PD-1, PD-L1, and **PD-L2** expression during normal  
and autoimmune responses.  
AUTHOR: Liang Spencer C; Latchman Yvette E; Buhlmann Janet E; Tomczak  
Michal F; Horwitz Bruce H; Freeman Gordon J; Sharpe Arlene H (Reprint)  
AUTHOR ADDRESS: Eugene Braunwald Research Center, 221 Longwood Avenue,  
Boston, MA, 02115, USA\*\*USA  
AUTHOR E-MAIL ADDRESS: asharpe@rics.bwh.harvard.edu  
JOURNAL: European Journal of Immunology 33 (10): p2706-2716 October 2003  
2003  
MEDIUM: print  
ISSN: 0014-2980 \_ (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/12 (Item 12 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014568935 BIOSIS NO.: 200300537654  
**B7-H2** nucleic acids, members of the **B7** family  
AUTHOR: Coyle Anthony J (Reprint); Fraser Christopher C; Manning Stephen  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1275 (3): Oct. 21, 2003 2003  
MEDIUM: e-file  
PATENT NUMBER: US 6635750 PATENT DATE GRANTED: October 21, 2003 20031021  
PATENT CLASSIFICATION: 536-235 PATENT ASSIGNEE: Millennium  
Pharmaceuticals, Inc. PATENT COUNTRY: USA  
ISSN: 0098-1133 \_ (ISSN print)  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/13 (Item 13 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014554053 BIOSIS NO.: 200300522772  
**B7-H2** Polypeptides  
AUTHOR: Coyle Anthony J (Reprint); Fraser Christopher C; Manning Stephen  
AUTHOR ADDRESS: Boston, MA, USA\*\*USA  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1275 (1): Oct. 7, 2003 2003  
MEDIUM: e-file  
PATENT NUMBER: US 6630575 PATENT DATE GRANTED: October 07, 2003 20031007  
PATENT CLASSIFICATION: 530-350 PATENT ASSIGNEE: Millennium  
Pharmaceuticals, Inc. PATENT COUNTRY: USA  
ISSN: 0098-1133 \_ (ISSN print)  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/14 (Item 14 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014523770 BIOSIS NO.: 200300477725  
- Differential binding properties of B7-H1 and B7-DC to  
- programmed death-1.  
AUTHOR: Yougnak Pornpan; Kozono Yuko (Reprint); Kozono Haruo; Iwai  
Hideyuki; Otsuki Noriko; Jin Hisayo; Omura Ken; Yagita Hideo; Pardoll  
Drew M; Chen Lieping; Azuma Miyuki  
AUTHOR ADDRESS: Department of Molecular Immunology, Graduate School, Tokyo  
Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo,  
113-8549, Japan\*\*Japan  
AUTHOR E-MAIL ADDRESS: yuko.mim@tdm.ac.jp  
JOURNAL: Biochemical and Biophysical Research Communications 307 (3): p  
672-677 August 1, 2003 2003  
MEDIUM: print  
ISSN: 0006-291X  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/15 (Item 15 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014479966 BIOSIS NO.: 200300437000  
Mouse \*\*\*B7\*\*\* -H3 induces antitumor immunity.  
AUTHOR: Sun X; Vale M; Leung E; Kanwar J R; Gupta R; Krissansen G W  
(Reprint)  
AUTHOR ADDRESS: Department of Molecular Medicine and Pathology, Faculty of  
Medicine and Health Science, University of Auckland, Auckland, New  
Zealand\*\*New Zealand  
JOURNAL: Gene Therapy 10 (20): p1728-1734 September 2003 2003  
MEDIUM: print  
ISSN: 0969-7128 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/16 (Item 16 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014441684 BIOSIS NO.: 200300400403  
Impaired germinal center formation and recall T-cell-dependent immune  
responses in mice lacking the costimulatory ligand \*\*\*B7\*\*\* - \*\*\*H2\*\*\* .  
AUTHOR: Wong Siew-Cheng; Oh Edwin; Ng Chee-Hoe; Lam Kong-Peng (Reprint)  
AUTHOR ADDRESS: Institute of Molecular and Cell Biology, 30 Medical Dr,  
Singapore, 117609, Singapore\*\*Singapore  
AUTHOR E-MAIL ADDRESS: mcb1amkp@imcb.nus.edu.sg  
JOURNAL: Blood 102 (4): p1381-1388 August 15, 2003 2003  
MEDIUM: print  
ISSN: 0006-4971  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/17 (Item 17 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014380571 BIOSIS NO.: 200300337314  
PD-1 Engagement Provides an Inhibitory Signal Which Downregulates T Cell

Alloresponses In Vivo.  
AUTHOR: Blazar Bruce R (Reprint); Carreno Beatriz M (Reprint);  
Panoskalsis-Mortari Angela (Reprint); Carter Laura J (Reprint); Iwai  
Yoshiko (Reprint); Yagita Hideo (Reprint); Nishimura Hiroyuki (Reprint);  
Taylor Patricia A (Reprint)  
AUTHOR ADDRESS: Pediatrics BMT, Univ. of Minn Cancer Center, Mpls, MN, USA  
\*\*USA  
JOURNAL: Blood 100 (11): pAbstract No. 261 November 16, 2002 2002  
MEDIUM: print  
CONFERENCE/MEETING: 44th Annual Meeting of the American Society of  
Hematology Philadelphia, PA, USA December 06-10, 2002; 20021206  
SPONSOR: American Society of Hematology  
ISSN: 0006-4971  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/18 (Item 18 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014341920 BIOSIS NO.: 200300299739  
Expression of the costimulatory molecule **B7-H2** (inducible  
costimulator ligand) by human airway epithelial cells.  
AUTHOR: Kurosawa Shin; Myers Allen C; Chen Lieping; Wang Shengdian; Ni Jian  
; Plitt James R; Heller Nicola M; Bochner Bruce S; Schleimer Robert P  
(Reprint)  
AUTHOR ADDRESS: Johns Hopkins Asthma and Allergy Center, 5501 Hopkins  
Bayview Circle, Room 3A.62, Baltimore, MD, 21224, USA\*\*USA  
AUTHOR E-MAIL ADDRESS: rschleim@jhmi.edu  
JOURNAL: American Journal of Respiratory Cell and Molecular Biology 28 (5  
MEDIUM: print  
ISSN: 1044-1549 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/19 (Item 19 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014104922 BIOSIS NO.: 200300063641  
A cell-based artificial antigen-presenting cell coated with anti-CD3 and  
CD28 antibodies enables rapid expansion and long-term growth of CD4 T  
lymphocytes.  
AUTHOR: Thomas Anna K; Maus Marcela V; Shalaby Waleed S; June Carl H; Riley  
James L (Reprint)  
AUTHOR ADDRESS: Abramson Family Cancer Research Institute, University of  
Pennsylvania, 421 Curie Boulevard, 508 BRB II/III, Philadelphia, PA,  
19104, USA\*\*USA  
AUTHOR E-MAIL ADDRESS: rileyj@mail.med.upenn.edu  
JOURNAL: Clinical Immunology (Orlando) 105 (3): p259-272 December 2002  
2002  
MEDIUM: print  
ISSN: 1521-6616 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/20 (Item 20 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014088084 BIOSIS NO.: 200300045433

Programmed death-1 targeting can promote allograft survival.

AUTHOR: Ozkaynak Engin; Wang Liqing; Goodearl Andrew; McDonald Kevin; Qin Shixin; O'Keefe Theresa; Duong Thao; Smith Tammy; Gutierrez-Ramos Jose-Carlos; Rottman James B; Coyle Anthony J; Hancock Wayne W (Reprint)

AUTHOR ADDRESS: Department of Pathology and Laboratory Medicine, Children's Hospital of Philadelphia, 3615 Civic Center Boulevard, 807B Abramson Research Center, Philadelphia, PA, 19104-4318, USA\*\*USA

AUTHOR E-MAIL ADDRESS: whancock@mail.med.upenn.edu

JOURNAL: Journal of Immunology 169 (11): p6546-6553 December 1, 2002 2002

MEDIUM: print

ISSN: 0022-1767 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

8/3/21 (Item 21 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0014075105 BIOSIS NO.: 200300033824

Expression of programmed death 1 ligands by murine T cells and APC.

AUTHOR: Yamazaki Tomohide; Akiba Hisaya; Iwai Hideyuki; Matsuda Hironori; Aoki Mami; Tanno Yuka; Shin Tapiro; Tsuchiya Haruo; Pardoll Drew M; Okumura Ko; Azuma Miyuki; Yagita Hideo (Reprint)

AUTHOR ADDRESS: Department of Immunology, Juntendo University School of Medicine, 2-1-1 Hongo, Bunkyo-ku, Tokyo, 113-8421, Japan\*\*Japan

AUTHOR E-MAIL ADDRESS: hyagita@med.juntendo.ac.jp

JOURNAL: Journal of Immunology 169 (10): p5538-5545 November 15, 2002 2002

MEDIUM: print

ISSN: 0022-1767 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

8/3/22 (Item 22 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0014029550 BIOSIS NO.: 200200623061

T lymphocytes express B7 family molecules following interaction with dendritic cells and acquire bystander costimulatory properties

AUTHOR: Ferlazzo Guido (Reprint); Semino Claudia; Meta Maurizio; Procopio Francesco; Morandi Barbara; Melioli Giovanni

AUTHOR ADDRESS: Laboratorio di Immunoterapia, Unita di Immunologia, Istituto Nazionale per la Ricerca sul Cancro, c/o CBA, Largo Rosanna Benzi, 10, I-16132, Genova, Italy\*\*Italy

JOURNAL: European Journal of Immunology 32 (11): p3092-3101 November, 2002 2002

MEDIUM: print

ISSN: 0014-2980

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

8/3/23 (Item 23 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013775582 BIOSIS NO.: 200200369093  
Blockade of PD-1 Ligands on dendritic cells enhances T cell activation and cytokine production  
AUTHOR: Brown Julia A (Reprint); Chernova Tatyana (Reprint); Dorfman David M; Boussiotis Vassiliki A (Reprint); Wood Clive R; Freeman Gordon J (Reprint)  
AUTHOR ADDRESS: Adult Oncology, Dana Farber Cancer Institute, 44 Binney St., Boston, MA, 02115, USA\*\*USA  
JOURNAL: FASEB Journal 16 (4): pA710 March 20, 2002 2002  
MEDIUM: print  
CONFERENCE/MEETING: Annual Meeting of the Professional Research Scientists on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002; 20020420  
ISSN: 0892-6638  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/24 (Item 24 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0013750445 BIOSIS NO.: 200200343956  
Expression of the costimulatory molecule B7-H2 by human airway epithelial cells  
AUTHOR: Kurosawa Shin (Reprint); Myers Allen C (Reprint); Chen Lieping; Ni Jian; Plitt James R (Reprint); Heller Nicola M (Reprint); Bochner Bruce S (Reprint); Schleimer Robert P (Reprint)  
AUTHOR ADDRESS: Johns Hopkins Asthma and Allergy Center, 5501 Hopkins Bayview Circle, Baltimore, MD, 21224, USA\*\*USA  
JOURNAL: FASEB Journal 16 (4): pA676 March 20, 2002 2002  
MEDIUM: print  
CONFERENCE/MEETING: Annual Meeting of the Professional Research Scientists on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002; 20020420  
ISSN: 0892-6638  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/25 (Item 25 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0013739726 BIOSIS NO.: 200200333237  
Negative co-receptors on lymphocytes  
AUTHOR: Greenwald Rebecca J (Reprint); Latchman Yvette E (Reprint); Sharpe Arlene H (Reprint)  
AUTHOR ADDRESS: Immunology Research Division, Department of Pathology, Brigham and Women's Hospital, 221 Longwood Avenue, Boston, MA, 02115, USA \*\*USA  
JOURNAL: Current Opinion in Immunology 14 (3): p391-396 June, 2002 2002  
MEDIUM: print  
ISSN: 0952-7915  
DOCUMENT TYPE: Article; Literature Review  
RECORD TYPE: Citation  
LANGUAGE: English

8/3/26 (Item 26 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)

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0013739725 BIOSIS NO.: 200200333236

The right place at the right time: Novel **B7** family members regulate effector T cell responses

AUTHOR: Liang Linda (Reprint); Sha William C (Reprint)

AUTHOR ADDRESS: Division of Immunology, University of California, Berkeley, 441 Life Sciences Addition, Berkeley, CA, 94720, USA\*\*USA

JOURNAL: Current Opinion in Immunology 14 (3): p384-390 June, 2002 2002

MEDIUM: print

ISSN: 0952-7915

DOCUMENT TYPE: Article; Literature Review

RECORD TYPE: Citation

LANGUAGE: English

8/3/27 (Item 27 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0013627872 BIOSIS NO.: 200200221383

PD-1:PD-L inhibitory pathway affects both CD4+ and CD8+ T cells and is overcome by IL-2

AUTHOR: Carter Laura L (Reprint); Fouser Lynette A; Jussif Jason; Fitz Lori ; Deng Bija; Wood Clive R; Collins Mary; Honjo Tasuku; Freeman Gordon J; Carreno Beatriz M

AUTHOR ADDRESS: Wyeth-Genetics Institute Inc., 200 Cambridge Park Drive, Cambridge, MA, 02140, USA\*\*USA

JOURNAL: European Journal of Immunology 32 (3): p634-643 March, 2002 2002

MEDIUM: print

ISSN: 0014-2980

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

8/3/28 (Item 28 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013557974 BIOSIS NO.: 200200151485

The role of in vivo PD-1/PD-L1 interactions in syngeneic and allogeneic antitumor responses in murine tumor models

AUTHOR: Zuberek Krystyna (Reprint); Runyon Kathlene (Reprint); Collins Mary (Reprint); Leonard John P (Reprint); Dunussi-Joannopoulos Kyri (Reprint)

AUTHOR ADDRESS: Immunology, Genetics Institute/Wyeth-Ayerst Research, Cambridge, MA, USA\*\*USA

JOURNAL: Blood 98 (11 Part 2): p42b November 16, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of

Hematology, Part 2 Orlando, Florida, USA December 07-11, 2001; 20011207

SPONSOR: American Society of Hematology

ISSN: 0006-4971

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

8/3/29 (Item 29 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0013238309 BIOSIS NO.: 200100410148

**PD-L2** is a second ligand for PD-1 and inhibits T cell

activation

AUTHOR: Latchman Yvette; Wood Clive R; Chernova Tatyana; Chaudhary Divya; Borde Madhuri; Chernova Irene; Iwai Yoshiko; Long Andrew J; Brown Julia A; Nunes Raquel; Greenfield Edward A; Bourque Karen; Boussiotis Vassiliki A; Carter Laura L; Carreno Beatriz M; Malenkovich Nelly; Nishimura Hiroyuki; Okazaki Taku; Honjo Tasuku; Sharpe Arlene H; Freeman Gordon J (Reprint)

AUTHOR ADDRESS: Department of Adult Oncology, Department of Medicine, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, 02115, USA\*\*USA

JOURNAL: Nature Immunology 2 (3): p261-268 March, 2001 2001

MEDIUM: print

ISSN: 1529-2908

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

8/3/30 (Item 30 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0013106826 BIOSIS NO.: 200100278665

**PD-L2**, a novel **B7** homologue, is a second ligand for PD-1 and inhibits T cell activation

AUTHOR: Latchman Yvette (Reprint); Wood Clive; Chernova Tatyana; Iwai Yoshiko; Malenkovich Nelly; Long Andrew; Bourque Karen; Boussiotis Vassiliki; Nishimura Hiroyuki; Honjo Tasuku; Sharpe Arlene (Reprint); Freeman Gordon

AUTHOR ADDRESS: Brigham and Womens Hospital and Harvard Medical School, 221 Longwood Ave, LMRC-5, Boston, MA, 02115, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

8/3/31 (Item 31 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013106825 BIOSIS NO.: 200100278664

Expression and functional consequences of PD-1 ligands on natural APCs and tumors

AUTHOR: Brown Julia A (Reprint); Dorfman David M; Butler Marcus (Reprint); Nunes Raquel (Reprint); Latchman Yvette; Long Andrew J; Iwai Yoshiko; Bourque Karen; Boussiotis Vassiliki A (Reprint); Chernova Tatyana (Reprint); Nishimura Hiroyuki; Fitz Lori; Malenkovich Nelly (Reprint); Honjo Tasuku; Wood Clive R; Nadler Lee M (Reprint); Sharpe Arlene H; Freeman Gordon J (Reprint)

AUTHOR ADDRESS: Dana-Farber Cancer Institute, 44 Binney St, Boston, MA, 02115, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

8/3/32 (Item 32 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0013106824 BIOSIS NO.: 200100278663

**B7-H3**, a novel member of the **B7** family that costimulates T cell responses and selectively enhances interferon-gamma production  
AUTHOR: Chapoval Andrei I (Reprint); Ni Jian; Lau Julie S (Reprint); Wilcox Ryan A (Reprint); Flies Dallas B (Reprint); Liu Ding; Dong Haidong (Reprint); Sica Gabriel L (Reprint); Zhu Gefeng (Reprint); Tamada Koji (Reprint); Chen Lieping (Reprint)

AUTHOR ADDRESS: Mayo Clinic, 200 First Street SW, Rochester, MN, 55905, USA  
\*\*USA

JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

8/3/33 (Item 33 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0013106812 BIOSIS NO.: 200100278651

Costimulation of tumor immunity by **B7-H2**, a ligand for ICOS  
AUTHOR: Wang Shengdian (Reprint); Zhu Gefeng (Reprint); Wilcox Ryan (Reprint); Chen Lieping (Reprint)

AUTHOR ADDRESS: Mayo Clinic, 200 First Street, SW, Rochester, MN, 55905, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

8/3/34 (Item 34 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0013104890 BIOSIS NO.: 200100276729

Characterization of ICOS-ligand splice variants

AUTHOR: Ling Vincent (Reprint); Wu Paul W (Reprint); Miyashiro Joy S (Reprint); Marusic Suzana (Reprint); Finnerty Heather F (Reprint); Collins Mary (Reprint)

AUTHOR ADDRESS: Genetics Institute, 87 Cambridge Park Drive, Cambridge, MA, 02140, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida,

USA March 31-April 04, 2001; 20010331  
ISSN: 0892-6638  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/35 (Item 35 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0012796803 BIOSIS NO.: 200000515116  
Costimulation of T cells by B7-H2, a B7-like molecule  
that binds ICOS  
AUTHOR: Wang Shengdian; Zhu Gefeng; Chapoval Andrei I; Dong Haidong; Tamada  
Koji; Ni Jian; Chen Lieping (Reprint)  
AUTHOR ADDRESS: Department of Immunology, Mayo Clinic, 200 First St SW,  
Rochester, MN, 55905, USA\*\*USA  
JOURNAL: Blood 96 (8): p2808-2813 October 15, 2000 2000  
MEDIUM: print  
ISSN: 0006-4971  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/36 (Item 36 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0010521169 BIOSIS NO.: 199699155229  
Allogeneic lymphocyte responses to B7-1 expressing human cancer cell  
lines  
AUTHOR: Dessureault Sophie; Gallinger Steven (Reprint)  
AUTHOR ADDRESS: Mt. Sinai Hosp., 1225-600 University Ave., Toronto, ON M5G  
1X5, Canada\*\*Canada  
JOURNAL: Journal of Surgical Research 64 (1): p42-48 1996 1996  
ISSN: 0022-4804  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/37 (Item 37 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0010161812 BIOSIS NO.: 199698629645  
Maturation of neonatal human CD4 T cells: III. Role of \*\*\*B7\*\*\*  
co-stimulation at priming  
AUTHOR: Yang Liang-Peng; Demeure Christian E; Byun Dae-Gyoo; Vezzio Nadia;  
Delespesse Guy (Reprint)  
AUTHOR ADDRESS: Allergy Res. Lab., Cent. Recherche Louis-Charles Simard,  
Notre-Dame Hosp., Univ. Montreal, 1560 Sherbrooke St. East, Montreal,  
Quebec H2L 4M1, Canada\*\*Canada  
JOURNAL: International Immunology 7 (12): p1987-1993 1995 1995  
ISSN: 0953-8178  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

8/3/38 (Item 38 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0007103574 BIOSIS NO.: 199089021465  
SYNTHESIS OF A7 **B7** DICARBAINSULIN AN ANALOGUE WITH A NONCLEAVABLE  
BOND BETWEEN A AND B-CHAIN II. SYNTHESIS OF THE A-CHAIN SEGMENTS  
AUTHOR: VIDENOV G (Reprint); STOEV S; BRANDENBURG D  
AUTHOR ADDRESS: DEUTSCHES WOLFFORSCHUNGINSTUT AND DER TECHNISCHEN  
HOCHSCHULE AACHEN, VELTMANPLATZ 8, D-5100 AACHEN\*\*GERMANY  
JOURNAL: Biological Chemistry Hoppe-Seyler 370 (10): p1103-1112 1989  
ISSN: 0177-3593  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: ENGLISH

8/3/39 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

12352187 EMBASE No: 2003471800  
Endothelial expression of PD-L1 and **PD-L2** down-regulates  
CD8SUP+ T cell activation and cytosis  
Rodig N.; Ryan T.; Allen J.A.; Pang H.; Grabie N.; Chernova T.;  
Greenfield E.A.; Liang S.C.; Sharpe A.H.; Lichtman A.H.; Freeman G.J.  
A.H. Lichtman, Department of Pathology, Brigham and Women's Hospital, 75  
Francis St., Boston, MA 02115 United States  
AUTHOR EMAIL: alichtman@rics.bwh.harvard.edu  
European Journal of Immunology ( EUR. J. IMMUNOL. ) (Germany) 2003,  
33/11 (3117-3126)  
CODEN: EJIMA ISSN: 0014-2980  
DOCUMENT TYPE: Journal ; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 42

8/3/40 (Item 2 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

12320140 EMBASE No: 2003433292  
Emerging immunomodulatory therapies targeting the co-stimulatory pathways  
for the prevention of transplant rejection  
Ansari M.J.I.; Abdi R.  
M.J.I. Ansari, Brigham and Women's Hospital, Lab. of  
Immunogen./Transplant., 75 Francis Street, Boston, MA 02115 United  
States  
AUTHOR EMAIL: jansari@rics.bwh.harvard.edu  
IDrugs ( IDRUGS ) (United Kingdom) 2003, 6/10 (964-969)  
CODEN: IDRUF ISSN: 1369-7056  
DOCUMENT TYPE: Journal ; Review  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 84

8/3/41 (Item 3 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

12128697 EMBASE No: 2003239609  
Expression of costimulatory molecules in human neuroblastoma. Evidence  
that CD40 + neuroblastoma cells undergo apoptosis following interaction  
with CD40L  
Airoldi I.; Lualdi S.; Bruno S.; Raffaghello L.; Occhino M.; Gambini C.;  
Pistoia V.; Corrias M.V.

Dr. V. Pistoia, Laboratory of Oncology, G Gaslini Institute, Largo G Gaslini, 5, 16148 Genova Italy  
AUTHOR EMAIL: vitopistoia@ospedale-gaslini.ge.it  
British Journal of Cancer ( BR. J. CANCER ) (United Kingdom) 19 MAY  
2003, 88/10 (1527-1536)  
CODEN: BJCAA ISSN: 0007-0920  
DOCUMENT TYPE: Journal ; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 50

8/3/42 (Item 4 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

11546863 EMBASE No: 2002116607  
PD-1:PD-L inhibitory pathway affects both CD4SUP+ and CD8SUP+ T cells and is overcome by IL-2  
Carter L.L.; Fouster L.A.; Jussif J.; Fitz L.; Deng B.; Wood C.R.; Collins M.; Honjo T.; Freeman G.J.; Carreno B.M.  
L. Carter, Wyeth-Genetics Institute, 200 Cambridge Park Drive, Cambridge, MA 02140 United States  
AUTHOR EMAIL: LCarter@genetics.com  
European Journal of Immunology ( EUR. J. IMMUNOL. ) (Germany) 2002, 32/3 (634-643)  
CODEN: EJIMA ISSN: 0014-2980  
DOCUMENT TYPE: Journal ; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 41

8/3/43 (Item 5 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

11189331 EMBASE No: 2001208376  
Differential expression of inducible costimulator-ligand splice variants: Lymphoid regulation of mouse GL50-B and human GL50 molecules  
Ling V.; Wu P.W.; Miyashiro J.S.; Marusic S.; Finnerty H.F.; Collins M.  
Dr. V. Ling, Department of Immunology, Genetics Institute, 87 Cambridge Park Drive, Cambridge, MA 02081 United States  
AUTHOR EMAIL: vling@genetics.com  
Journal of Immunology ( J. IMMUNOL. ) (United States) 15 JUN 2001, 166/12 (7300-7308)  
CODEN: JOIMA ISSN: 0022-1767  
DOCUMENT TYPE: Journal ; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 29

8/3/44 (Item 6 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

07673780 EMBASE No: 1999136316  
Enhancement of B7-1 (CD80) expression on B-lymphoma cells by irradiation  
Seo A.; Ishikawa F.; Nakano H.; Nakazaki H.; Kobayashi K.; Kakiuchi T.  
Dr. T. Kakiuchi, Department of Immunology, Toho University School of Medicine, 5-21-16 Omori-nishi, Ota-ku, Tokyo 143-8540 Japan  
Immunology ( IMMUNOLOGY ) (United Kingdom) 1999, 96/4 (642-648)  
CODEN: IMMUA ISSN: 0019-2805  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 40

8/3/45 (Item 7 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

07459262 EMBASE No: 1998377904  
L-selectin and beta7 integrin synergistically mediate lymphocyte migration to mesenteric lymph nodes  
Wagner N.; Lohler J.; Tedder T.F.; Rajewsky K.; Muller W.; Steeber D.A.  
N. Wagner, Institute for Genetics, University of Cologne, Weyertal 121,  
D-50937 Cologne Germany  
AUTHOR EMAIL: n.wagner@uni-koeln.de  
European Journal of Immunology ( EUR. J. IMMUNOL. ) (Germany) 1998,  
28/11 (3832-3839)  
CODEN: EJIMA ISSN: 0014-2980  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 31

8/3/46 (Item 1 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2004 The Dialog Corp. All rts. reserv.

16030244 PMID: 15098076  
Cloning and Identification of Two Novel Splice Variants of Human PD  
- \*\*\*L2\*\*\*  
He Xian-Hui; Liu Yi; Xu Li-Hui; Zeng Yao-Ying  
Key Laboratory of Tissue Transplantation and Immunology, Jinan University, Ministry of Education, Guangzhou 510632, China. ozms@jnu.edu.cn  
Sheng wu hua xue yu sheng wu wu li xue bao Acta biochimica et biophysica Sinica (China) Apr 2004, 36 (4) p284-9, ISSN 0582-9879  
Journal Code: 20730160R  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: In Data Review

8/3/47 (Item 2 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2004 The Dialog Corp. All rts. reserv.

15547226 PMID: 14603470  
Expression of the B7-related molecule ICOSL by human glioma cells in vitro and in vivo.  
Schreiner Bettina; Wischhusen Jorg; Mitsdoerffer Meike; Schneider Dagmar; Bornemann Antje; Melms Arthur; Tolosa Eva; Weller Michael; Wiendl Heinz  
Department of Neurology, University of Tubingen, Medical School, Tubingen, Germany.  
Glia (United States) Dec 2003, 44 (3) p296-301, ISSN 0894-1491  
Journal Code: 8806785  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

8/3/48 (Item 3 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2004 The Dialog Corp. All rts. reserv.

12406016 PMID: 12800259

In situ expression and significance of B7 costimulatory molecules within tissues of human gastric carcinoma.

Chen Xiao-Li; Cao Xu-Dong; Kang An-Jing; Wang Kang-Min; Su Bao-Shan; Wang Yi-Li

Department of Pathology, Second Hospital of Xi'an Jiaotong University, Xi'an 710004, Shaanxi Province, China. chenxiaoli64@student@sina.com

World journal of gastroenterology - WJG (China) Jun 2003, 9 (6) p1370-3, ISSN 1007-9327 Journal Code: 100883448

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

8/3/49 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

12325590 PMID: 12690043

Muscle fibres and cultured muscle cells express the \*\*\*B7\*\*\* 1/2-related inducible co-stimulatory molecule, ICOSL: implications for the pathogenesis of inflammatory myopathies.

Wiendl Heinz; Mitsdoerffer Meike; Schneider Dagmar; Melms Arthur; Lochmuller Hanns; Hohlfeld Reinhard; Weller Michael

Department of Neurology, University of Tuebingen, Medical School, Tuebingen, Germany. heinz.wiendl@uni-tuebingen.de

Brain; a journal of neurology (England) May 2003, 126 (Pt 5) p1026-35, ISSN 0006-8950 Journal Code: 0372537

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

8/3/50 (Item 5 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

11772948 PMID: 11956294

Ligand binding sites of inducible costimulator and high avidity mutants with improved function.

Wang Shengdian; Zhu Gefeng; Tamada Koji; Chen Lieping; Bajorath Jurgen

Department of Immunology, Mayo Clinic, Rochester, MN 55905, USA.

Journal of experimental medicine (United States) Apr 15 2002, 195 (8) p1033-41, ISSN 0022-1007 Journal Code: 2985109R

Contract/Grant No.: CA79915; CA; NCI; CA85712; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

8/3/51 (Item 6 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

11687543 PMID: 11861596

The B7 family of ligands and its receptors: new pathways for costimulation and inhibition of immune responses.

Carreno Beatriz M; Collins Mary

Genetics Institute/Wyeth Research, 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, USA. bcarreno@genetics.com

Annual review of immunology (United States) 2002, 20 p29-53, ISSN

0732-0582 Journal Code: 8309206  
Document type: Journal Article; Review; Review, Tutorial  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

8/3/52 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

140161941 CA: 140(11)161941g JOURNAL  
Control of autoimmune diseases by the B7-CD28 family molecules  
AUTHOR(S): Anand, Sudarshan; Chen, Lieping  
LOCATION: Department of Immunology, Mayo Clinic, Mayo Medical School and  
Graduate School, Rochester, MN, 55905, USA  
JOURNAL: Curr. Pharm. Des. (Current Pharmaceutical Design) DATE: 2004  
VOLUME: 10 NUMBER: 2 PAGES: 121-128 CODEN: CPDEFP ISSN: 1381-6128  
LANGUAGE: English PUBLISHER: Bentham Science Publishers Ltd.

8/3/53 (Item 2 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

140040900 CA: 140(4)40900j PATENT  
Immunomodulation in a mammal by the alteration of specific gene  
expression in dendritic cells using small interfering RNA, and therapeutic  
uses  
INVENTOR(AUTHOR): Min, Wei-ping; Ichim, Thomas; Hill, Jonathan  
LOCATION: Can.,  
ASSIGNEE: London Health Sciences Centre Research Inc.  
PATENT: PCT International ; WO 2003104456 A1 DATE: 20031218  
APPLICATION: WO 2003CA867 (20030610) \*CA 2388441 (20020610)  
PAGES: 52 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/11A;  
C12N-005/10B; A61K-039/00B; A61P-037/00B DESIGNATED COUNTRIES: AE; AG; AL;  
AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK;  
DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE;  
KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ;  
NI; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR;  
TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU;  
TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM;  
ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT;  
LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG

8/3/54 (Item 3 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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140040883 CA: 140(4)40883f PATENT  
Epstein-Barr virus-specific immunization  
INVENTOR(AUTHOR): Celis, Esteban  
LOCATION: USA  
ASSIGNEE: Mayo Foundation for Medical Education and Research  
PATENT: PCT International ; WO 2003105665 A2 DATE: 20031224  
APPLICATION: WO 2003US18682 (20030613) \*US PV388625 (20020614)  
PAGES: 56 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61B-000/A  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;  
SG; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZM; ZW; AM;

AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3/55 (Item 4 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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140026615 CA: 140(3)26615p JOURNAL  
Informatics and the immune system: the expanding IL-1 and B7 protein families  
AUTHOR(S): Grant, Ethan P.; Coyle, Anthony J.; Gutierrez-Ramos, Jose-Carlos  
LOCATION: Millennium Pharmaceuticals, Inc., Cambridge, MA, 02139, USA  
JOURNAL: Semin. Immunol. (Seminars in Immunology) DATE: 2003 VOLUME: 15  
NUMBER: 4 PAGES: 225-231 CODEN: SEIME2 ISSN: 1044-5323 LANGUAGE:  
English PUBLISHER: Elsevier Science B.V.

8/3/56 (Item 5 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

139192528 CA: 139(13)192528m PATENT  
Sequences of the modified human protein ICOS having altered affinity for B7-H2  
INVENTOR(AUTHOR): Chen, Lieping; Bajorath, Jurgen  
LOCATION: USA  
PATENT: U.S. Pat. Appl. Publ. ; US 20030158102 A1 DATE: 20030821  
APPLICATION: US 72622 (20020207)  
PAGES: 27 pp. CODEN: USXXCO LANGUAGE: English CLASS: 514012000;  
A61K-038/17A; C07K-014/47B; C12P-021/02B; C12N-005/06B; C07H-021/04B

8/3/57 (Item 6 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

139099862 CA: 139(7)99862f PATENT  
Activation and expansion of T-cells using an engineered multivalent signaling platform  
INVENTOR(AUTHOR): Maus, Marcela; Thomas, Anna; June, Carl; Riley, James  
LOCATION: USA  
ASSIGNEE: The Trustees of the University of Pennsylvania  
PATENT: PCT International ; WO 200357171 A2 DATE: 20030717  
APPLICATION: WO 2003US339 (20030103) \*US PV346092 (20020103)  
PAGES: 108 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-000/A  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS ; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3/58 (Item 7 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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138384162 CA: 138(25)384162p PATENT  
Antibodies and small molecules that modulate immune cell activation  
through blockage of PD-1 ligands and B7 molecules  
INVENTOR(AUTHOR): Freeman, Gordon J.; Sharpe, Arlene H.; Buhlman, Janet;  
Mandelbrot, Didier  
LOCATION: USA  
ASSIGNEE: Dana-Farber Cancer Institute, Inc.; Brigham and Women's  
Hospital  
PATENT: PCT International ; WO 200342402 A2 DATE: 20030522  
APPLICATION: WO 2002US36518 (20021112) \*US PV337817 (20011113)  
PAGES: 72 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-000/A  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;  
SG; SI; SK; SL; TJ; TM; TN; TR; TZ; UA; UG; UZ; VC; VN; YU; ZA; ZM; ZW;  
AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW;  
; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;  
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR; BF; BJ; CF; CG; CI; CM;  
GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3/59 (Item 8 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

138168815 CA: 138(12)168815m PATENT  
B7-related nucleic acids and polypeptides useful for immunomodulation  
INVENTOR(AUTHOR): Mikesell, Glen E.; Shen, Henry  
LOCATION: USA  
PATENT: U.S. Pat. Appl. Publ. ; US 20030031675 A1 DATE: 20030213  
APPLICATION: US 77023 (20020215) \*US PV209811 (20000606) \*US PV272107  
(20010228) \*US 875338 (20010606)  
PAGES: 163 pp., Cont.-in-part of U.S. Ser. No. 875,338. CODEN: USXXCO  
LANGUAGE: English CLASS: 424178100; A61K-039/395A; C07H-021/04B;  
C12P-021/04B; C12N-001/21B; C12N-005/04B; C12N-005/06B

8/3/60 (Item 9 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

137305774 CA: 137(21)305774t PATENT  
Human cDNA sequences and their encoded proteins and diagnostic and  
therapeutic uses  
INVENTOR(AUTHOR): Anderson, David; Burgess, Catherine E.; Casman, Stacie  
J.; Colman, Steven; Edinger, Schlomit; Ellerman, Karen; Gerlach, Valerie;  
Gunther, Erik; Kekuda, Ramesh; MacDougall, John R.; Mehraban, Fuad;  
Patturajan, Meera; Rothenberg, Mark; Shimkets, Richard A.; Smithson,  
Glennnda; Spytek, Kimberly A.; Stone, David J.; Vernet, Corine A. M.;  
Zerhusen, Bryan D.  
LOCATION: USA  
ASSIGNEE: Curagen Corporation  
PATENT: PCT International ; WO 200281510 A2 DATE: 20021017  
APPLICATION: WO 2002US1467 (20020118) \*US PV262454 (20010118) \*US  
PV262892 (20010119) \*US PV263605 (20010123) \*US PV264159 (20010125) \*US  
PV265517 (20010131) \*US PV267057 (20010207) \*US PV269098 (20010215) \*US  
PV271855 (20010227) \*US PV272920 (20010302) \*US PV284549 (20010418) \*US  
PV285040 (20010420) \*US PV286287 (20010424) \*US PV303229 (20010705)  
PAGES: 415 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/00A  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;

SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD ; SL; SZ; TZ; UG; ZM; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3/61 (Item 10 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

137153820 CA: 137(11)153820q PATENT  
Protein and cDNA sequences of novel members of human B7 family, B7-H2 molecules, and uses thereof  
INVENTOR(AUTHOR): Coyle, Anthony J.; Fraser, Christopher C.; Manning, Stephen  
LOCATION: USA  
ASSIGNEE: Millennium Pharmaceuticals, Inc.  
PATENT: U.S. Pat. Appl. Publ. ; US 20020106730 A1 DATE: 20020808  
APPLICATION: US 910174 (20010720) \*US 620461 (20000720)  
PAGES: 101 pp., Cont.-in-part of U.S. Ser. No. 620,461. CODEN: USXXCO  
LANGUAGE: English CLASS: 435069100; C07K-014/705A; C07H-021/04B; C12P-021/02B; C12N-005/06B

8/3/62 (Item 11 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

137108297 CA: 137(8)108297p PATENT  
B7-related factors BSL1, BSL2 and BSL3, encoding nucleic acids and antibodies for immunomodulation and treatment of cancer, viral infection, autoimmune disease, transplant rejection and graft versus host disease  
INVENTOR(AUTHOR): Mikesell, Glen E.; Chang, Han; Finger, Joshua N.; Yang, Guchen; Lu, Pin; Zhou, Xia-Di; Peach, Robert J.  
LOCATION: USA  
PATENT: U.S. Pat. Appl. Publ. ; US 20020095024 A1 DATE: 20020718  
APPLICATION: US 875338 (20010606) \*US PV209811 (20000606) \*US PV272107 (20010228)  
PAGES: 82 pp., Cont.-in-part of U.S. Provisional Ser. No. 272,107.  
CODEN: USXXCO LANGUAGE: English CLASS: 530350000; C07K-014/705A; C07K-016/28B; C12P-021/02B; C07H-021/04B; C12N-005/06B

8/3/63 (Item 12 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

137077882 CA: 137(6)77882u PATENT  
Human antigen B7-H2 and cDNAs and drug screening targeted to its regulation and other therapeutic application for related diseases  
INVENTOR(AUTHOR): Encinas, Jeffrey; Tanabe, Eri; Watanabe, Shinichi  
LOCATION: Germany,  
ASSIGNEE: Bayer Aktiengesellschaft  
PATENT: PCT International ; WO 200253733 A2 DATE: 20020711  
APPLICATION: WO 2002EP28 (20020104) \*US PV259632 (20010104)  
PAGES: 105 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/12A; C07K-014/47B; G01N-033/68B DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PH; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH ; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; CH; CY; DE; DK;

ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3/64 (Item 13 from file: 399)  
DIALOG(R) File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

136149860 CA: 136(10)149860q PATENT  
B7-H3 and B7-H4, novel immunoregulatory molecules  
INVENTOR(AUTHOR): Chen, Lieping  
LOCATION: USA  
ASSIGNEE: Mayo Foundation for Medical Education and Research  
PATENT: PCT International ; WO 200210187 A1 DATE: 20020207  
APPLICATION: WO 2001US41430 (20010726) \*US PV220991 (20000727)  
PAGES: 61 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A;  
C12N-015/00B; C12N-015/12B; C12N-015/63B; C07K-016/46B  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
CA; CH; CN; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM;  
HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV;  
MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK;  
SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ;  
MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ  
; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL;  
PT; SE; TR; BF; BJ; CF; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3/65 (Item 14 from file: 399)  
DIALOG(R) File 399:CA SEARCH(R)  
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136146182 CA: 136(10)146182j PATENT  
Protein and cDNA sequences of novel human and mouse protein B7-H2  
sequence homologs and uses thereof  
INVENTOR(AUTHOR): Coyle, Anthony J.; Fraser, Christopher C.; Manning,  
Stephen  
LOCATION: USA  
ASSIGNEE: Millennium Pharmaceuticals, Inc.  
PATENT: PCT International ; WO 200208279 A2 DATE: 20020131  
APPLICATION: WO 2001US23094 (20010720) \*US 620461 (20000720)  
PAGES: 169 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/47A  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AT; AU; AZ; BA; BB; BG; BR; BY;  
BZ; CA; CH; CN; CO; CR; CU; CZ; CZ; DE; DE; DK; DK; DM; DZ; EC; EE; EE; ES;  
FI; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ;  
LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT;  
RO; RU; SD; SE; SG; SI; SK; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU;  
ZA; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS  
; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;  
GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CI; CM; GA; GN; GQ; GW;  
ML; MR; NE; SN; TD; TG

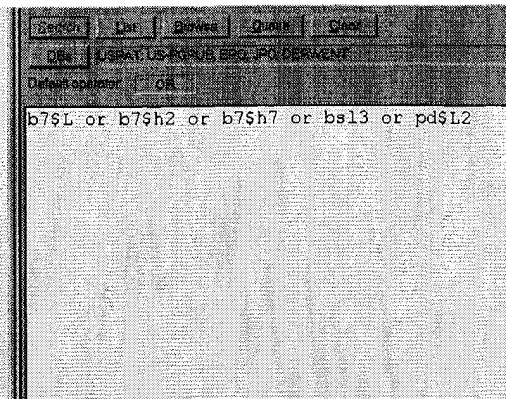
8/3/66 (Item 15 from file: 399)  
DIALOG(R) File 399:CA SEARCH(R)  
(c) 2004 American Chemical Society. All rts. reserv.

134218032 CA: 134(16)218032u PATENT  
Cloning and characterization of a B7 homolog 3 (B7-H3) protein and its  
therapeutic application  
INVENTOR(AUTHOR): Ruben, Steven M.; Chen, Lieping; Baker, Kevin; Ni, Jian  
LOCATION: USA  
ASSIGNEE: Human Genome Sciences, Inc.; Mayo Clinic  
PATENT: PCT International ; WO 200118021 A1 DATE: 20010315  
APPLICATION: WO 2000US23792 (20000830) \*US PV152317 (19990903) \*US

PV200346 (20000428)

PAGES: 252 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A;  
C12N-001/21B; C12N-015/00B; C12N-015/63B; C07K-014/46B; C07K-014/52B;  
A61K-038/00B; C12Q-001/68B; G01N-033/53B DESIGNATED COUNTRIES: AE; AG; AL;  
AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CR; CU; CZ; DE; DK; DM;  
DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP;  
KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ;  
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ;  
VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH  
; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES;  
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN;  
GW; ML; MR; NE; SN; TD; TG  
?

Drafts  
 BRS:  
 Pending  
 Active  
L17: (1115) b7S1 or b7Sh2 or b7Sh7 or b813 or pd\$12  
L18: (209) L17 and b7S  
L19: (2) fox-gary-\$in. and b7S  
L20: (30) yoshinaga.in. and b7S  
 Failed  
 Saved  
 Favorites  
 Tagged (0)  
 UDC  
 Queue  
 Trash



09/955866

01/05/2006

Set	Items	Description
S1	30	E3-E6
S2	29	RD S1 (unique items)
S3	28	E1-E5
S4	0	(S1 OR S3) AND (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD-(W)L2)
S5	17	(S1 OR S3) AND B7?
S6	12	RD S5 (unique items)
S7	112	(B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD(W)L2) AND B7?
S8	66	RD S7 (unique items)
S9	15	S8 AND PY<2002
?		